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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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04/24/2002

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EXAMINER

HALIYUR, VENKATESH N

ART UNIT

PAPER NUMBER

2664

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/031,951	Applicant(s) AOYAMA ET AL.	
	Examiner Venkatesh Haliyur	Art Unit 2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04/24/2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2 pages</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 11 have been examined.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. JAPAN 2000-157430 filed on 05/26/2000.

Claim Rejections - 35 USC § 112

3. Claims 1-4,8-10 are rejected under 35 USC § 112, 2nd paragraph. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "same directivity condition" in claims 1-4,8-10 are used by the claims to mean a specific directivity condition, while the accepted meaning of the term is a specific formula or description pertaining to the art. The term is indefinite because the specification does not clearly redefine the term "same directivity condition".

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,5,8 are rejected under 35 U.S.C. 102(b) as being anticipated by KESKITALO et al [WO 96/37970].

Regarding claim 1, KESKITALO et al. disclosed "Method for Transmitting Pilot Channels, and A Cellular Radio System" and a method for radio base station apparatus comprising determining means for determining a communication terminal apparatus that uses a shared channel that is common to all the communication terminals under control of a base station [Figs 5-7], based on a request signal in each of a plurality of uplink signals [Fig 8] and which contains a request signal for requesting the use of the shared channel, modulation means for modulating transmission data and a supplemental common pilot channel signal to be transmitted to the determined communication terminal apparatus, and directivity control means [Fig 1] for transmitting the transmission data and the supplemental common pilot channel signal under the same directivity condition [Figs 1-10, Pages, 1-21].

Regarding claim 5, KESKITALO et al. disclosed the communication terminal apparatus comprising despreading means for despreading a downlink signal with each of all candidate spreading codes for a spreading code used in spreading a supplemental common pilot channel, spreading code specifying means for comparing despread results on the candidate spreading codes to specify the spreading code used in spreading the supplemental common pilot channel, and demodulation means [Fig 9] for demodulating a downlink signal on a shared channel that is common to all

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communication terminals under control of a base station, by a demodulation scheme corresponding to the specified spreading code [Figs 1-10, Pages, 1-46].

Regarding claims 8, KESKITALO et al. disclosed wireless communication method comprising method of determining a communication terminal apparatus that uses a shared channel that is common to all the communication terminals under control of a base station, based on a request signal in each of a plurality of uplink signals and which contains a request signal for requesting the use of the shared channel, a modulation step of modulating transmission data and a supplemental common pilot channel signal to be transmitted to the determined communication terminal apparatus, and a directivity control step of transmitting transmission data and the supplemental common pilot channel signal under the same directivity condition [Figs 1-10, Pages, 1-46]

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka et al [US Pat: 6,347,220].

Regarding claims 1-4, Tanaka et al. disclosed "Multiple Beam Antenna System of Wireless Base Station" and a method for radio base station apparatus comprising determining means for determining a communication terminal apparatus that uses a

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shared channel that is common to all the communication terminals under control of a base station [item 11 of Fig 1], based on a request signal (based on the presence of uplink signal) in each of a plurality of uplink signals [item USD of Fig 5] and which contains a request signal for requesting the use of the shared channel, modulation means for modulating transmission data [item SD of Fig 2] and a supplemental common pilot channel signal to be transmitted to the determined communication terminal apparatus, and directivity control means [item TBF of Fig 1] for transmitting the transmission data and the supplemental common pilot channel signal [item PLE of Fig 6] under the same directivity condition and further disclosed information on modulation scheme [item SD of Fig 2] and pilot signal pattern [items 25,26 of Fig 7] and generating a signal indicative of the determined modulation scheme, and inserting the generated signal as a control signal into a supplemental common pilot channel, and directivity control means for transmitting the transmission data and the supplemental common pilot channel signal to be transmitted to the determined communication terminal apparatus under the same directivity condition [Figs 1-17, columns 1-10, column 11, lines 1-40].

Regarding claim 5, Tanaka et al. disclosed the communication terminal apparatus comprising despreading means [item 23 of Fig 7] for despreading a downlink signal with each of all candidate spreading codes for a spreading code used in spreading a supplemental common pilot channel, spreading code specifying means for comparing despread results on the candidate spreading codes to specify the spreading code used in spreading the supplemental common pilot channel, and demodulation means [item 24

of Fig 9] for demodulating a downlink signal on a shared channel that is common to all communication terminals under control of a base station, by a demodulation scheme corresponding to the specified spreading code [Figs 1-17, columns 1-14].

Regarding claims 6,7, Tanaka et al. disclosed the communication terminal apparatus comprising channel estimation means for performing channel estimation (quality) on a downlink signal with each of all candidate pilot patterns for a pilot pattern used on a supplemental common pilot channel, pilot pattern specifying means for comparing channel estimation results on the candidate pilot patterns to specify the pilot pattern used on the supplemental common pilot channel, and demodulation means for demodulating a downlink signal on a shared channel that is common to all communication terminals under control of a base station, by a demodulation scheme corresponding to the specified pilot pattern and means for demodulating a control signal [Figs 7-9, column 11, lines 41-67, columns 12-14].

Regarding claims 8,10, Tanaka et al. disclosed wireless communication method comprising method of determining a communication terminal apparatus that uses a shared channel that is common to all the communication terminals under control of a base station, based on a request signal in each of a plurality of uplink signals and which contains a request signal for requesting the use of the shared channel, a modulation step of modulating transmission data and a supplemental common pilot channel signal to be transmitted to the determined communication terminal apparatus, and a directivity control step of transmitting transmission data and the supplemental common pilot channel signal under the same directivity condition [Figs 1-17, columns 1-10, column

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11, lines 1-40].

Regarding claim 9, Tanaka et al. disclosed a wireless communication method comprising, a determining step of determining a communication terminal apparatus that uses a shared channel that is common to all the communication terminals under control of a base station, based on a request signal in each of a plurality of uplink signals and which contains capability information on modulation scheme and a request signal for requesting the use of the shared channel, a spreading code selecting step of selecting a spreading code for use in spreading a supplemental common pilot channel, based on the capability information of the determined communication terminal apparatus; and a directivity control step of transmitting transmission data and the supplemental common pilot channel signal to be transmitted to the determined communication terminal apparatus under the same directivity condition [Figs 1-17, columns 1-14].

Regarding claim 11, Tanaka et al. disclosed the wireless communication method comprising a determining step of determining a communication terminal apparatus that uses a shared channel that is common to all the communication terminals under control of a base station, based on a request signal in each of a plurality of uplink signals and which contains capability information on modulation scheme and a request signal for requesting the use of the shared channel, a control signal generating step of determining a modulation scheme based on the capability information of the determined communication terminal apparatus, generating a signal indicative of the determined modulation scheme, and inserting the generated signal as a control signal into a supplemental common pilot channel; and a directivity control step of transmitting the

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transmission data and the supplemental common pilot channel signal to be transmitted to the determined communication terminal apparatus with the same directivity [Figs 1-17, Columns 1-14].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art in reference here is Tanaka et al [US Pat: 6,347,220] and KESKITALO et al [WO 96/37970].

5. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached @ (571)-272-3134. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).


Ajit Patel
Primary Examiner